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ABSTRACT

Intended to help the Hawaii Vocational Rehabilitation and Services for the Blind administration improve productivity, this report focuses on the measurement of productivity and on the use of program information to monitor performance and to investigate the causes of productivity problems. A process is recommended for establishing performance objectives on agency goals, using a phasing approach where performance objectives are set in the short-term for top priority goals. A recommendation is then made for short-term prioritization of agency goals. These indicators are suggested for top priority: the number of clients closed as rehabilitated, the proportion of clients closed as rehabilitated out of all clients who are accepted for service, the proportion of clients closed into competitive employment, the proportion of noncompetitively employed rehabilitated clients showing improvement in life status and functional abilities, total costs per rehabilitation, and percent of severely handicapped clients accepted for service. As an introduction to the use of performance measures for management decision making, an example is presented of the use of productivity information to identify administrative actions that should be taken when indicators point to problematic performance. (Author/YLB)

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RECOMMENDATIONS FOR ESTABLISHING PERFORMANCE OBJECTIVES ON PRODUCTIVITY GOALS BY HAWAII VOCATIONAL REHABILITATION AND SERVICES FOR THE BLIND (HVRSB)

February 1983

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ABSTRACT

RECOMMENDATIONS FOR ESTABLISHING PERFORMANCE OBJECTIVES ON PRODUCTIVITY GOALS BY HAWAII VOCATIONAL REHABILITATION AND SERVICES FOR THE BLIND (HVRSB)

Report by J. Mark Rogers, Berkeley Planning Associates, February 1983, 35 pp.

The HVRSB administration has expressed an interest in improving its productivity. This report focuses on the measurement of productivity and on the use of program information to monitor performance and investigate the causes of productivity problems. The report includes a recommended process for establishing performance objectives on agency goals, using a phasing approach where performance objectives are set in the short term for top priority goals. Indicators suggested for top priority include: the number of clients closed rehabilitated; the proportion of clients closed rehabilitated out of all clients who are accepted for service; the proportion of 26 closures closed into competitive employment; the proportion of noncompetitively employed 26 closures showing improvement in life status and functional abilities; total costs per rehabilitation; and percent of severely handicapped clients accepted for services. Finally, as an introduction to the use of performance measures for management decision-making, the report presents an example of use of productivity information to identify administrative actions which should be taken when indicators point to problematic performance.

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I. INTRODUCTION

The Rehabilitative Services Administration (RSA) is sponsoring a three-year project to provide management consulting and technical assistance to state Vocational Rehabilitation agencies, to assist those agencies in developing effective planning, management, and information systems. As part of this activity, a TA consultant from Berkeley Planning Associates (BPA) conducted a site visit to the Hawaii Vocational Rehabilitation and Services for the Blind (HVRSB). Prior to the visit, the consultant conducted telephone discussions with various HVRSB personnel, and received and reviewed several documents pertaining to the agency's structure, past performance, and management information system.

The HVRSB administration expressed an interest in improving its productivity. This report focuses on the measurement of productivity and on the use of program information to monitor performance and investigate the causes of productivity problems. From our discussions on-site with agency staff, it is clear that central office management has been seeking ways to expand its evaluation of productivity. At the same time, the agency administration has wisely recognized the need to avoid imposing too many new productivity goals on staff too quickly. This is especially important given that, with the goals put forth by HVRSB management, improvement on one goal might mean decreased performance on other goals. In an attempt to overcome these conflicts while still maintaining an ongoing thrust toward improved overall productivity, BPA has developed the following for HVRSB:

- a recommended process for establishing performance objectives on agency goals (Section II of this report). Our recommendation revolves around a phasing approach, where performance objectives are set in the short-term only for "top priority" goals. Over the short-term period, program analysis is conducted to understand the type and extent of tradeoffs existing between the various goals, and to understand the ways in which those tradeoffs can be overcome. With findings from these analyses, the agency is

then in a position to set performance objectives across the full range of goals (i.e., "top priority" and "other" goals) in such a way that overall productivity is maximized.

- A recommendation for short-term prioritization of agency goals (Section III of this report). Here we present our suggestions as to the indicators which we feel will provide the greatest impact on overall productivity, and therefore which we feel should be emphasized in the short-term.

The agency's Staff Services Office (SSO) will play a key role in ensuring the link between management information and operational decision-making in the field. SSO will be responsible not only for responding to field requests for information, but also for assisting field staff in interpreting performance and operational data. In support of this function, we have developed:

- an example of the use of program information in managing VR operations (Section IV of this report). This section discusses hypothetical examples of the process SSO might follow in analyzing program information for purposes of identifying the causes of productivity problems. This process embodies the analytic linkage between information on productivity or the lack of it, and management interventions aimed at improving productivity.

In the chapters which follow, we place the issues within the context of the general VR program (i.e., Section 110). However, the processes we describe are also relevant to other sections of HVRSB's total scope of operations. Regardless of the particular activity, HVRSB will still want to identify and prioritize productivity goals and perform analysis of the reasons why performance has not met goals.

II. A RECOMMENDED PROCESS FOR ESTABLISHING PERFORMANCE OBJECTIVES ON AGENCY GOALS

Concern was expressed by almost all HVRSB staff interviewed that, while the agency needed a more complete expression of productivity goals, it was important to "avoid having too many contingency variables" in the agency's statement of goals. In other words, counselors and line managers should not be presented with too many different types of goals, or goals that conflict. However, the vocational rehabilitation program has several conflicting, though legitimate, performance goals. For example, as outcome quality increase (e.g., wages at closure go up), costs may go up as well (since more service and training may be required to achieve greater wages at closure). What is needed is a system for setting performance objectives that accounts for the tradeoffs among performance goals, consistent with the overall policy objectives of the agency. That is, VR agencies must understand the conflicts among goals and to set performance objectives.

While the conflicts among goals are understood at a conceptual level (e.g., better outcomes may lead to higher agency costs), the precise tradeoffs are not well understood (e.g., an "x" percent increase in competitive employment closures requires a "y" dollar increase in expenditures per rehabilitation). As such, HVRSB cannot establish empirically-based performance objectives which account for specific tradeoffs among goals. However, over the next few years, the agency could observe performance across the set of goal measures and obtain estimates of the tradeoffs between goals (either through "eyeballing" of performance data, or through more rigorous statistical estimation techniques). These estimates could then be used to set actual performance objectives. Using this approach, the agency could make explicit linkages between its own priorities and known tradeoffs. A hypothetical example will illustrate how this would work.

Assume that HVRSB wishes to increase competitive employment closures from a current figure of 50% (hypothetical) to 80%, and that it is known from statistical testing that each 10% increase in competitive employment

closures requires a corresponding increase of $50 per rehabilitation. Further, assume the agency currently spends $500 per rehabilitation (total expenditures, not case service costs). Given this set of circumstances, the agency could reasonably expect that a thirty percentage point increase in competitive employment closures (from 50% to 80%) would generate a $150 increase in total expenditures per rehabilitation (from $500 to $650 per 26). As such, it would be appropriate, at least for the first year, to raise the performance goal for costs per rehabilitation from $500 to $650. This assumes that the agency is willing to absorb a $150 increase in costs per rehabilitation.

Alternatively, and consistent with the agency's overall thrust towards improved productivity, top management might set goals of 80% competitive employment and $575-$600 per rehabilitation. In this scenario, the agency clearly establishes its intention to achieve a particular goal (80% competitive closures) while allowing for a level of "slippage" in costs per rehabilitation which is less than what would be expected given known relationships between outcomes and costs (i.e., a $75-$100 increase versus a $150 increase).

Finally, a third alternative would be for the agency to perform program analysis to determine if the desired 80% competitive employment could be reached while maintaining the $500/rehabilitation cost. Using this approach, the agency would look at its performance data to answer questions such as:

- Are there particular service approaches (perhaps used by particular counselors) which lead to the desired proportion of competitive employment closures at a lower cost? Can these approaches be replicated by other counselors?
- Are there particular types of clients which cost less to rehabilitate into competitive employment? Can the agency focus its admissions on these clients while still maintaining sufficient admissions of other priority clients and/or clients with particular disabilities?
- Are particular competitive employment job goals easier and less costly to obtain (in terms of service costs) and can the agency direct clients toward those job goals while still being responsive to client wishes?

This third alternative would be the preferable approach to setting revised numerical performance objectives because it provides a theoretical and empirical basis for establishing performance objectives. Thus, based on program analysis, top management is able to:

- determine procedural or policy changes which promise to bring desired improvements in productivity;
- disseminate information to field staff and managers regarding the improved "technologies" (admissions practices, service planning and provision, etc.);
- monitor staff practices in relation to suggested/required technologies;
- intervene in cases of nonjustified noncompliance with new policies or procedures;
- evaluate new policies and procedures with respect to their effectiveness in bringing about improved productivity; and
- validate the precise level of tradeoffs suggested by the program analysis.

While this is the preferable approach to setting performance objectives, it is of necessity a long-term solution to the agency's needs. In the short-term, HVRSB needs to establish a goal prioritization through some other process. Further, the approach taken must avoid sending too many "signals" to field staff in terms of what is expected of them, but must be flexible enough to allow modification and addition of goals as more is learned about the tradeoffs involved in meeting conflicting goals. In response to these criteria, BPA recommends that the agency adopt a phasing approach to establishing productivity goals. This approach uses two phases. Phase I includes the following activities:

- disseminate information on agency goals to staff, via an agency policy statement;
- identify "top priority" goals and secondary goals;
- establish actual numerical performance objectives for counselors, field offices, and other substate units as deemed appropriate by management, for the top priority goals;

- on the regular reporting cycle (e.g., monthly or quarterly), distribute performance reports to all staff as appropriate. For example, each counselor should receive a report which shows: current performance on each productivity measure; current performance relative to past performance (e.g., previous month or year); current performance relative to a higher service unit (e.g., counselor's performance compared to the average performance for counselors in the field office or the general VR services division); and, for top priority goals, performance relative to the established performance objective.
- Over the short-term (two-three years), focus management activities on top priority goals. As performance reports are received, field managers and counselors should pay particular attention to the top priority performance measures for which performance objectives have been established. These reports can be used to compare a counselor's performance against other counselors and the field office as a whole, and against the counselor's performance objectives. If particular counselors fail to meet their objectives (or if it appears, based on interim reports, that some counselors will fail to meet annual objectives), the field manager might want to speak with the counselors to get their sense of "what went wrong." For example, if a counselor is failing to get enough competitive employment closures, the field manager might want answers to such questions as: "Are greater numbers of such closures imminent?" (In which case, "poor" performance may be merely an artifact of the timing of the performance report, to be replaced by "acceptable" performance by the point of the next performance report.) Are the kinds of clients served by the counselor appropriate for competitive employment? (If not, the manager must decide either to lower performance expectations for this counselor on the competitive employment measure or to direct the counselor to accept fewer such applicants in the future.) The role of the Staff Services Office in this activity would be to respond to requests for information from field managers. These requests may consist of special analyses of caseload characteristics,

service expenditures, impact of services, and so on.

- In addition to fielding information requests from district offices, SSO would, in this short-term period, undertake data analyses to help understand the ways in which field staff can improve productivity on top priority goals through alterations in casework practices. These analyses would be similar, in terms of content, to those conducted at the request of field managers. However, they should be broader in the sense that the "unit of analysis" could be the whole agency instead of a counselor or field office; and in the sense that they would be conducted specifically to inform major procedural and policy changes of a longer-term nature, rather than short-term management-oriented decisions about specific counselors or clients. For example, SSO might undertake a study of the relative cost-effectiveness of different services and service packages in achieving competitive employment closures.

  To take a hypothetical situation, SSO might find that, though it costs somewhat more to provide job search assistance, clients' chances for obtaining competitive employment are enhanced by the service to the extent that the increased cost is deemed "worth it." If such were the case, the agency might want to mandate (through written policy guidelines) that job search assistance be provided to all clients seeking competitive employment, and that cases where it is not provided be documented as to the reasons why it was not provided. Other analyses might focus on particular types of clients (in terms of disability): What types of jobs are these clients successful in obtaining? Are counselors with specific types of training more successful in working with these clients toward competitive employment? Are clients receiving post-employment services substantially more likely to retain their jobs? These are but a very few of the questions SSO might address in the short term to help field staff to refine their techniques and target services

in the most appropriate manner given client circumstances and goals, and given available agency resources.

The management focus on top priority goals during the short term cannot be underemphasized, and should be obvious given the above discussion; explicit performance objectives are made on these goals, management interventions key in on these goals, and SSO's analytic activities are aimed at improving productivity in terms of these goals. Ideally, as a result of these various activities, performance on top priority productivity goals will improve as a result of both increased attention paid to those goals (through written policy statements, explicit performance objectives, and targeted management review and intervention), and increased understanding of the "inputs" (clients, services, counselor training, etc.) which enhance the probability of achieving those goals.

Further, as the agency obtains greater understanding of the techniques and procedures which are most effective in achieving top priority goals, the agency could increase performance objectives expected of field staff. To the extent that performance objectives are met for these goals, agency management can move ahead to specify performance objectives on the secondary goals. If performance objectives on top priority goals have not been attained, it would be unwise to further complicate the signals sent to field staff through additional performance expectations. Instead, the agency should continue to focus its management energies toward those goals already identified as top priority. (In fact, the agency might even consider focusing on a smaller set of goals for more intensive management attention.) However, assuming that performance on top priority goals does improve to the point desired by management, then it is appropriate to move into Phase II: institutionalizing performance objectives on the secondary productivity measures.

"Institutionalization" will actually have begun long before the end of the short-term management period. Throughout this period, performance reports to field managers and counselors will have included performance figures on the secondary productivity measures. Though there will not have been specific performance objectives on these measures, and though the goals represented by these performance measures will not have been a principal focus of field management interventions, the simple step of providing

information on performance will serve to initiate the process of institutionalizing these additional productivity goals. Before the first performance report goes out to staff, the agency will have established (e.g., through a written memo to all staff) that, in addition to the "top priority" goals, there are other secondary goals (with attendant performance measures) on which staff will be held accountable at a later time. This policy statement will be further reinforced by the actual performance figures received by staff in the quarterly or monthly reports. Thus, by seeing actual performance numbers for themselves and their counterparts, counselors and field office managers may become sensitized to the impending evaluation of their performance in terms of these other indicators. Further, this strategy will hopefully stimulate field staff to think about the tradeoffs involved in satisfying various goals, which in turn could lead to greater understanding of the reasons why tradeoffs exist and how to overcome those tradeoffs to maximize achievement of all goals. Thus, over the short-term period, to the extent that staff meet top priority goals, both managers and staff may be able to turn their attention to improving performance on the other goals. It is important to emphasize, however, that this would be appropriate only to the extent that performance on top priority goals is meeting top management's expectations.

The Quality Circle activities used by the agency can play a big role in encouraging improved productivity on all agency goals. Reports provided to staff will give them an objective viewpoint on which to base discussions about how best to meet top priority goals, and how to tailor services to the needs of clients so as to maximize performance on all agency goals. As staff interact and implement ideas coming out of the quality circle, they will be able to track the success of their ideas by observing any changes (hopefully, improvements) in their individual and collective performance on productivity measures. Thus, performance reports can become a tool not only for targeting management interventions, but also for encouraging discussion among staff about how best to achieve agency goals. The end result should be a greater understanding and internalization of agency goals, thus making all staff "of one mind" as to what those goals are. Ideally, internalization would occur before the end of the two-to-three-year short-term period, so there will be no surprises when the time comes to evaluate staff on other performance goals.

Thus, during the short-term, institutionalization of secondary goals will have already begun on an informal basis through providing performance reports and encouraging discussion about how to achieve these goals. However, a much more formal set of activities should occur at the same time, for purposes of identifying tradeoffs and specifying numerical performance objectives on other goals. Recall that the agency wishes to set performance objectives which are realistic; that is, which are attainable given known tradeoffs, known technologies for overcoming tradeoffs, and total resources. It would be SSO's job to help agency managers determine what is "realistic." BPA recommends that through the short-term period, SSO regularly conduct special statistical analyses of the performance measures representing secondary agency goals. For example:

- factor analyses could be run at regular intervals, which include each of the productivity indicators chosen by agency management. Based on these analyses, it may be clear that certain of the indicators measure "the same thing" (i.e., the same aspect of performance). In such a case, it may be appropriate for the administration to remove certain indicators from performance reports. This will serve to simplify the entire reporting and staff evaluation process.
- In conjunction with the causal analyses on top priority measures, SSO would also conduct analyses aimed at understanding the factors which influence performance on other goals. Here, the objective is to identify the services and other inputs (e.g., types of counselor training) which are most successful in achieving each goal.
- Correlation and regression analyses would then be used to numerically estimate tradeoffs among conflicting goals. As we noted earlier, this is the stage where SSO attempts to provide answers such as: "A 10% increase in competitive employment closures will generate a $50 increase in costs per closure, other things being equal." This step would then be followed by simultaneous equation models to test for the systems impact (i.e., the simultaneous changes in performance across all

indicators) resulting from variations in client mix, the type, amount, and cost of services provided, etc. The results of these analyses will allow the agency to estimate the set of tradeoffs as a group, and therefore to forecast performance on each indicator, given a particular set of operational circumstances.

Once these analyses are conducted, agency management will need to make some policy decisions based on what is learned from the simultaneous equation models about the effects of different combinations of service technology. Possibly, one combination of technologies might present the optimum approach; that is, the approach generating the highest performance on all indicators. In this case, the performance scores registered for each indicator could serve as the minimum performance objective for staff. More likely, no one combination of technologies and procedures will provide optimum performance across all indicators. For example, one analysis might suggest that service "x" generates a 15% increase in the proportion of competitively employed closures, but reduces the total number of 26s by 30% and raises costs per competitively employed closure by 18%.

Other tests may show different levels and directions of effect on the group of indicators. In this case, policy decisions must be made regarding the emphasis to be afforded each goal. For example, should the agency follow an approach which maximizes the number of 26s obtained but which minimizes the proportion closed competitively and the proportion retaining their jobs over time? Alternatively, should the agency try to maximize closure "quality" (i.e., wages earned and retention) even though this probably means numbers served will go down and costs will go up? The strength of effect will be relevant in these decisions. For example, it may be deemed acceptable to trade off a 15% increase in competitive closures for a 9% increase in costs, but not acceptable to increase costs 15% in order to achieve a 20% increase in competitive closures. Consideration of these kinds of tradeoffs must occur in the process for setting performance objectives at the end of the short-term period. Once the analyses are conducted and the policy decisions regarding tradeoffs are made, performance objectives can be set. Basically, this again means using the estimated scores from the chosen model as minimum performance expectations

for counselors and field offices. These numerical objectives should be accompanied by training of field staff in the technologies determined by the analyses as effective in achieving the desired level of performance on each goal. In this way, staff will have the tools to achieve at levels which are "realistic," and therefore the agency administration's policies can only be seen as "reasonable."

With this, the agency will have completed the first full "cycle" of the process for setting performance expectations on the full range of agency goals. This should be a recurring cycle from that point on. Thus, in future years, staff should continue to receive performance reports. Simultaneously, SSO would continue its analytic activities to further refine the agency's understanding of tradeoffs and technologies which succeed in overcoming tradeoffs among goals. From the knowledge gained, the agency can revise its service practices and review their effectiveness through subsequent performance reports. Proven technologies should then be instituted as formal policy. The end result should be constant refinement of practice and improved productivity on all agency goals.

We feel that phasing is the best approach the agency can take in that, from the start, it is comprehensive (i.e., all goals chosen by agency management are included in the policy statement to staff, and are represented in recurrent performance reports). Yet the phasing approach allows for an early targeting of top priority goals and a gradual introduction of additional goals as the agency learns more about the factors influencing performance on different goals. Finally, we would expect that the phasing approach, in combination with program analysis and staff training, will generate the least resistance from field staff as additional performance objectives are introduced.

III. A RECOMMENDATION FOR SHORT-TERM PRIORITIZATION OF AGENCY GOALS

In the previous section, we presented our recommendation for a phasing approach to the process of institutionalizing productivity goals and performance objectives. Below, we discuss our recommendations for the specific performance indicators which might be used to represent top priority goals in the short-term for management and performance evaluation purposes. These are the indicators which represent the agency's top priority goals, and for which specific performance objectives would be established for counselors and field offices.

BPA recommends that HVRSB draw its indicators from the set of data elements developed for the revised VR Program Standards Evaluation System. The standards are directly tied to the most common VR agency goals. By the end of the short-term period, the agency should be able to specify realistic performance expectations on each of the indicators selected to represent different agency goals. However, for the short-term period, we recommend that the agency use the following as its "top priority" indicators:

- the number or clients closed rehabilitated (# 26s);
- the proportion of clients closed rehabilitated out of all clients who are accepted for service (# 26s/ # 26s + # 28s + # 30s);
- the proportion of 26 closures closed into competitive employment (# competitively employed/# 26s);
- the proportion of noncompetitively employed 26 closures showing improvement in life status and functional abilities $\left(\frac{\text{\# noncompetitive 26s showing improvement}}{\text{\# noncompetitive 26s}}\right)$
- total costs per rehabilitation (total expenditures/# 26s); and
- percent of severely handicapped clients accepted for service $\left(\frac{\text{\# SDs in status 10-30}}{\text{Total in status 10-30}}\right)$.

We recommend this set of performance indicators in the belief that the agency will achieve the greatest level of improvement in overall productivity through management emphasis on these measures of performance. The

list is short, and therefore should be "manageable" in terms of communicating priorities to staff and obtaining an effective response from staff in the short term. Further, it continues the agency's current emphasis on rehabilitations, while injecting an expanded set of concerns into the agency's overall set of priorities. These recommendations are consistent with our understanding, gleaned from on-site discussions with staff, of those goals which are appropriate for designation as "top priority" goals. Further detailed rationales for including each indicator as top priority are as fol'ows:

- Total number of 26s: This is the most traditional and basic indicator of VR agency output, well-understood by all staff. It is the simplest and most direct measure of "raw output." It answers the question: "Are we producing enough of what we're supposed to produce?"

- Percent of 26s out of all accepted closures: This data element measures the extent of "wasted effort" as inferred by the proportion of nonrehabilitated closures accepted into the system. Poor performance on this indicator suggests several possible problems with the agency's (or field office's or counselor's) "production technology."

An excessive proportion of nonrehabilitated closures suggests that resources have been used unproductively: for each such closure, the agency has incurred costs in terms of service costs, counselor time and effort, and support costs such as clerical time, data storage (paper files and computer space), and supervisory time (e.g., for case reviews). These costs would presumably be lower for 30s than for 28s, but even clients closed in status 30 may generate service costs during plan development, counselor costs resulting from plan development and recordkeeping, and support costs. Though costs are incurred for these clients, there is no "payoff" for the agency, in the sense that a rehabilitation did not result. (This statement reflects the notion that clients closed 28 or 30 get no "benefit" from participation in VR. While such clients may, in fact, derive some benefit from VR, and there are those who would argue this is the case, BPA recommends the agency follow a policy of "no benefit" -- and therefore, no credit to staff -- for nonrehabilitated closures.) Finally, in addition to unproductive use of resources, a 28 or 30 closure is likely to represent a case where clients were inconvenienced and disappointed, more so than a 26, when this could possibly have been avoided.

• Percent competitively employed: This indicator is related to the previous two in that it is essentially a measure of production. It is, however, a measure which takes a finer cut at evaluation of production, and as such could potentially cause resistance by counselors. Nonetheless, BPA feels that this indicator represents VR's highest goal: that of assisting clients to obtain gainful (i.e., remunerative) employment. This is the essence of vocational rehabilitation. Further arguments for including this indicator as a top priority are that: 1) competitive employment was noted by the agency staff as an important agency goal; and 2) to the extent that the agency improves on this indicator, other indicators of performance should also show improvement. In particular, increases in competitively employed closures should increase the average closure wages among 26 closures, and increase the agency's benefit-cost ratio (as a result of increased earnings, taxes paid, and reduced welfare).

Specification of performance objectives on this indicator should always presume some proportion of noncompetitive closures. This is consistent with VR's broad mission to serve those most in need and to help all clients achieve their "maximum potential," and it is consistent with the notion that not all eligible clients will be appropriate for paid employment in the competitive labor market. However, the agency administration should make clear to field staff that noncompetitive employment closures are to be considered the "residual" of their competitive employment performance objective. Field staff will need to target those clients for whom noncompetitive employment is the only feasible vocation.

• Percent of noncompetitively employed 26 closures showing improvement in life status and functional abilities: This indicator serves two broad purposes. First, it is a "production" indicator like the previous three in that it measures an aspect of agency output for a particular group of clients. We have already implied that noncompetitive closures are "less valuable" as a VR output than competitive closures. However, because they are still a legitimate type of closure, it is important that the agency make sure such clients do, in fact, benefit from VR services. The specific data items for measuring life status and functional abilities are currently being pretested by RSA. When complete, those items can serve as the basis for HVRSB's performance assessments.

The second purpose for including this indicator is to provide a check agianst familiar "numbers game" incentives resulting from traditional VR evaluation systems based solely on the number of 26s obtained. It is important that the noncompetitive closure statuses not be used as "dumping grounds" for clients with whom staff were unsuccessful (i.e., clients who would normally be closed 28 or 30). Given the incentives inherent in the first two recommended indicators (number and percent of 26s) the temptation may be very great to classify someone as a noncompetitively employed 26 closure rather than as a 28 or 30 closure. While this strategy probably can never be totally eliminated, use of this indicator should give managers a tool for monitoring its occurrence.

• Total expenditures per rehabilitation: Thus far, we have discussed indicators pertaining to what can be termed production output. With this data element, we link production to resource use. Production can thus be evaluated within a standardized context of production efficiency. We recommend including this indicator in the top priority group for two reasons. First, given the agency administration's focus on productivity, this data element is an obvious choice for early attention by management.

Second, this indicator is useful for helping answer management questions above and beyond the basic unit-cost-per-rehab issue. Specifically, this indicator serves as a starting point for agency investigations into caseload flow issues. To see this, we recommend that SSO review the decision-support analysis model (decision "tree") developed by BPA for investigating excessive costs per rehabilitation.[1] Through use of related information items, this decision tree will lead SSO and managers to investigate problems in, as appropriate, the agency's client acceptance processes, its overall service planning and provision mechanisms, or its procedures for placing clients and closing their cases. In addition, of course, the decision tree suggests ways the agency might analyze its service and administrative cost structures. Thus, by including costs-per-rehab as a top priority indicator, management not only ensures attention to a key productivity goal, but also simplifies the agency's task in pinpointing the most likely causes of productivity problems among many complex causes.

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[1]See Berkeley Planning Associates, The Rehabilitation Executive's Evaluation System (TREES): Data-Based Decision Support Using the Program Standards System, Data Element 2(ii).

Two points should be made regarding the construction and reporting of this indicator to staff. Specifically, as currently constructed, this indicator includes administrative and other nonservice costs within the "total expenditures" component. As such, in its current construction, the indicator is not perfectly tailored to the circumstances of counselors, who may not directly incur administrative costs. For counselors, the intent of this indicator could be satisfied by modifying the expenditures component to include those items relevant to counselors. Obviously, this would include service costs, but could also include the counselor's salary and fringe benefit costs and/or other costs identified by management. Such modifications presumably would not be necessary for reporting performance at the area or district level, since administrative and other costs should be directly attributable to those offices.

The second point is that the agency should understand the distinction between the total costs-per-rehab indicator and the related average life-of-case services costs indicator. The latter indicator is, in our opinion, less powerful as a management tool in that, if calculated for 26 closures only, it excludes all administrative costs and all service costs incurred for nonacceptances and nonrehabilitants. While such costs may be unavoidable, they are still essentially "nonproductive" costs which the agency would want to minimize. The implications of this difference can be seen by a hypothetical example. Assume a district office gets 100 rehabilitations in a given year, and that the service costs attributable to those closures comes to $25,000. Here, the average life-of-case service cost for 26s is $250. However, the office may have incurred a total of $45,000 during the period for all operations, including administrative and support staff costs and service costs spent for extended evaluation and nonrehabilitants. Here, average total expenditures per 26 would be $450. While excessive life-of-case costs might alert management to a pattern of overly-generous service planning, it ignores other possible inefficiencies. An additional drawback is that life-of-case cost measures are not constrained as to time: depending on time-in-status, costs entered into the calculation could have been incurred several years previously. Such an indicator obviously is less valuable for day-to-day and short-term planning and management than indicators constrained to a specific period (as is total expenditures per

rehab). These arguments are not meant to imply that life-of-case cost indicators are never useful, but rather that they are less useful as a first-cut management tool. For these reasons, we recommend HVRSB use total expenditures per rehab as its basic production efficiency measure.

- Percent severely handicapped: This indicator is recommended because of the priority emphasis within the agency and at the federal level on assisting those most in need of vocational rehabilitation services. Inclusion of this indicator in performance reports will serve to highlight the administration's focus on these clients.

SETTING PERFORMANCE OBJECTIVES ON TOP PRIORITY GOAL INDICATORS

As with the secondary goals, the agency will want to set initial performance objectives on top priority goals at "realistic" levels. Perhaps the simplest way to do that is to set objectives at some level slightly higher than the agency has experienced in the recent previous years: this would be an "historic norm" approach. However, the agency should be wary of accepting historic levels as the objectives for individual offices, especially if the levels are well below agency-wide norms. Such a practice could build-in mediocrity from the start. The administration should begin by setting performance goals for the agency as a whole, and then "parcel out" those goals among offices. These goals should be internally consistent. That is, the agency goal for total 26 closures should equal (or be less than) the sum of the individual goals set for the different local offices. Where indicators involve rates (e.g., the percentage of successful outcomes), the initial presumption should be that the agency-wide goal should hold for all individual offices unless that office can justify why a lower rate should be set. Currently high performing offices may wish to set even higher goals for the future, but the agency should be careful not to let such offices set unrealistic goals lest the quality of services be reduced in the effort to meet the goals, or alternatively, failure be built in.

The central office should review the performance of each field office with its administrator at the end of each fiscal year. It is strongly desirable that some central office presence be seen in the first review to give emphasis to the agency's new productivity focus. Any review

with administrators should conclude with written statements of intended actions to improve performance, and should be followed during the next six months with at least one follow-up discussion based on monitoring the improvement. Without this follow-up, which signals the field that the central office is seriously committed to continuing the emphasis, one cannot expect changes in behavior. If the follow-up is not done, it would be better if the initiative were not taken at all, lest the central office's credibility be undermined.

The performance measured by the standards should be made part of the counselor's personnel file, as well as the district administrator's, and specifically considered in promotion and merit increases. That is, the expectation should be that counselors will at least perform close to the norm established in the state by the typical counselor. Performances well above the norm should receive praise and reward, while performances below the norm need major corrective action. District administrators and supervisors should be held accountable by the central office for improving the performance of counselors below the norm, with specific monitoring undertaken of such improvements once problems are detected.

Most importantly, the performance of field offices and districts should be reviewed in annual budget negotiations and in allocation decisions. Offices with high performance should be rewarded with more resources. Offices with problematic performance should be provided additional resources only if they can demonstrate how such resources would be put to a use in a way likely to bring performance up to state-wide norms. In times of fiscal austerity, low performing offices should be made the most vulnerable to staff reductions and transfers.

SUMMARY

The recommendations presented here for a possible goal prioritization are based on our understanding of the HVRSB administation's priorities, and on our opinions as to those aspects of overall VR productivity which are most appropriate for monitoring and evaluation. The agency may feel that other indicators or additional indicators are also appropriate for inclusion within the "top priority" group. However, BPA feels that for the short-term, the recommended indicators will provide the agency with a basic,

well-rounded picture of its performance in meeting major goals. To briefly reiterate our rationale, the set of indicators will help the agency monitor productivity in terms of:

- production output:
  - -- raw output (number of 26s);
  - -- "wasted effort" (percent 26s);
  - -- production of "best quality" outcomes (percent competitively employed); and
  - -- benefit to clients with less than "best quality" outcomes (percent of noncompetitive closures showing improvement in life status and functional abilities);
- production efficiency (total expenditures per 26 closure); and
- appropriate targeting of services (percent severely disabled).

The agency could opt to include indicators which more finely measure each of these three broad aspects of productivity. For example, production output could also be measured with such indicators as average wage of 26s, retention of employment, and reduction in welfare benefits. Efficiency could be measured in terms of costs per different types of services and other detailed cost breakdowns, and targeting could be measured in terms of the proportion of clients with different disabilities. For the short term (again, two to three years), we recommend that the agency not expand the group of top priority indicators. BPA feels that HVRSB's long-range productivity objectives will be best served by focusing on a few basic indicators and building up to an expanded set. This is not to say that, even in the short term, the agency would make no use of additional data items. In fact, extensive use should be made of them. We have already discussed how indicators representing "other" goals would ideally appear in the recurring performance reports. These might include such outcome and productivity measures as the proportion of clients earning the minimum wage; the proportion of clients retaining employment over time; average change in clients' earnings after VR; the agency's benefit-cost ratio; and other data items suggested in BPA's revised Performance Standards System.

But, again, in order to avoid diluting the agency's initial efforts at improving productivity, it is recommended that for the short term these indicators be used for information only, rather than as items on which

performance will be evaluated. Other data items, such as detailed cost and caseload breakdowns, should be considered as management tools for analyzing performance and informing management decision-making, rather than as productivity indicators. Take the example of time-in-status statistics for monitoring case flow. We would argue that it is important to know this information, not for the purpose of punishing counselors with slow-moving caseloads, but rather for the purpose of pointing out to the counselor that slow case movement now can lead to caseload bottlenecks and low productivity later. It is important for the agency to understand the distinction between an "end-state" productivity measure appropriate for use in staff evaluation, and an "in process" indicator useful as a management tool.

IV. AN EXAMPLE OF THE USE OF PROGRAM INFORMATION IN MANAGING VR OPERATIONS

The purpose of this section is to provide the agency with a brief, hypothetical example of the reports and analyses the agency might use in investigating performance problems of a particular nature. The example is presented in terms of the performance of individual field offices around the state.

The first step in using information for management is to obtain basic, descriptive data on the performance of field offices. With this, possible performance problems will become apparent. Table 1 shows one possible format for such a report. BPA recommends that the agency develop such a report for distribution to the agency director, the chief of SSO, and each field office administrator. (The cell entries of this table denote those cases where field office performance is substantially below the office's performance expectation on the indicator. These entries are for illustration and discussion. An actual performance report would have actual numbers denoting the performance obtained by the office.) This table format is useful in several ways. In one summary format, information is presented which allows for an assessment across field offices in terms of a particular aspect of performance (i.e., reading down the "indicator" columns), and which allows for an assessment within a field office across all aspects of performance (i.e., reading across the "field office" rows). In addition, readers can compare the performance of a given field office to the aggregate performance of all VR services field offices ("Total, VR Services"); to the VR services section of Blind Services ("Total, Blind Services (VR)"); and to the combined performance of all VR services ("Agency Total"). An analogous report could be prepared for distribution to counselors, supervisors, and field office administrators. The columns of such a report would be the same, but the row entries would consist of individual counselors, the aggregate field office figures, and figures for VR and Blind Services and the agency total.

The cell entries in Table 1 have been chosen to illustrate a variety of possible performance problems. The configuration of "problems" has been

Table 1

Comparative Performance on Top Priority Indicators Across Field Office, Service Branch, and Agency

(An asterisk indicates the field office failed to meet its performance objective by a substantial amount.)

Field Office	Performance Indicator					
	#26s	#26/26+28+30	# Competitive / # 26s	Improvement in IL Skills (N-C-E)*	Expenditures / #26s	% Severely Handicapped
A						*
B			*			
C				*		
D		*				
E	*				*	
F	*	*			*	
Total, VR Services						
Total, Blind Services, VR						
Agency Total						

*Defined as: $\frac{\text{\# of noncompetitive closures with improvement in function and life status}}{\text{\# of noncompetitive closures}}$

set out for discussion only. The agency actually may never see certain of the situations in its own monitoring of performance. A table such as this provides the agency with a tool for interpreting performance on individual indicators, within the context of the agency's overall productivity evaluation system. Indirectly, summary tables such as these can suggest the types and levels of tradeoffs involved in striving to meet conflicting goals.

The lack of any notations in the "Total, VR Services," "Total Blind Services (VR)," and "Agency Total" rows indicates that, overall, the service divisions and the agency are meeting all performance goals. As such, the problems noted across field offices cannot be attributed (at first glance, at least) to state-wide conditions. Were this the case, the agency would want to look to those field offices which had met goals to determine factors which allowed the offices to succeed, and to possibly use those offices as models for the rest of the agency. As it is, were Table 1 an actual performance report, the assumption could be made that the offices' various "problems" result from circumstances within the particular field office. The table suggests the following problems:

- Office A has met its output and efficiency goals, but has failed to admit a sufficient proportion of severely handicapped clients. This may in part explain why the office has been able to meet its other productivity goals. For this office, the agency may want to investigate the decision rules used by counselors and intake staff: Are acceptance criteria too restrictive? Alternatively, diagnostic services and extended evaluation might be expanded to assist counselors in assessing client potential and in writing service plans. Other reasons may appear on investigation as to why the office serves too few severely handicapped. Agency management should probably expect some drop in performance on the remaining productivity measures as this problem is corrected.

- Office B has met all its objectives except that for percent competitively employed. Note that, since the office achieved its desired number of 26s, and a sufficient proportion of noncompetitive 26s showed improvement, the office at least succeeded in benefitting clients for whom the "highest goal" was infeasible. Nonetheless, quite possibly the office may have closed many clients into noncompetitive employment when their original plan called for a competitive employment closure.

- Office C is doing well in meeting the major output, efficiency, and targeting goals. However, an unacceptably large proportion of its noncompetitive employment closures show no improvement. This immediately suggests one of two things: either the office has not learned how to effectively help clients with noncompetitive employment plans, or some "dumping" of clients who should have been closed 28 or 30 has occurred. In the latter case, if the "truth be known" (i.e., counselors coded closures "by the book"), we might expect the office's performance on number and percent of 26s to drop. Fortunately, the percentage of competitively employed closures would not be affected.

- Office D has sufficient 26 closures and those closures meet goals for competitive employment and improvement. However, too many clients were closed unsuccessfully. This is a case where the office may have overworked itself admitting clients and simply could not succeed with the added load of clients over and above their objective for number of 26s. However, since costs per 26 are acceptable, it does not appear that large amounts or resources were expended for "nonproductive" uses. Still, effort has been "wasted," and the goal is to see if the office can more productively target the clients it accepts and the services it provides.

- Office E failed to rehabilitate enough clients, though of those rehabilitated, adequate proportions obtained competitive employment and showed improvement. Further, there was no "wasted effort," inasmuch as a sufficient proportion of all closures were rehabilitated. However, even this is problematic, given the following logic: If the number of 26s is too small but the proportion is acceptable, then the number of 28s and 30s is "too small." Stated differently, the total number of closures is too small. (This is reflected in the poor showing on costs per 26.) The office's task is to see if it can increase the total number of closures, thereby hopefully increasing the number of 26s in the process. More clients must be pushed through the system faster. Hopefully, this can be done while maintaining closure quality (i.e., by maintaining objectives for competitive employment and improvement). Here, SSO would want to analyze whether resources could be used more efficiently; for example, through lower cost and shorter duration plans (which may have negative implications for closure quality), or through admitting different types of clients (which may have negative implications for the agency's targeting goal).

• Office F has a situation where both the number and proportion of clients closed 26 are too low. In the absence of actual data, we cannot know if the total number of closures is also too low (as with Office E). If so, this office needs to push more clients through faster, like Office E. If enough total closures are occurring, then the office needs to better target its clients and do a better job in providing service (as was the case with Office D).

Having identified the broad aspects of productivity on which different offices perform poorly, the task becomes one of investigating the reasons for inadequate performance. Then, of course, findings from these investigations should be transformed into action plans intended to improve performance. We present a specific, hypothetical example of what SSO might find in investigating a performance problem, and how SSO would go about the task. We use Office D from Table 1 above for illustration. Following this, we discuss the general issues SSO might address in conducting decision-support analyses.

Recall that Office D failed to rehabilitate a sufficient proportion of clients, but that the goal for number of 26s was met. In the course of analysis, the following findings might result. SSO might obtain data on closure status by disability, as in Table 2. As Table 2 suggests, the office was at least successful with deaf clients. Immediately one decision response is possible: restrict entry by deaf people. However, this is probably an unattractive option, and so the task becomes one of determining more effective approaches to succeeding with deaf clients. Probably the first place to look for an answer is to observe the pattern of services received by deaf clients and to see which among the services appears most related to successful rehabilitation. Table 3 presents the hypothetical results of such an analysis, in which two services -- on-the-job training and facility services -- appear most successful. (Such findings might be corroborated by obtaining similar cross-tab data for other offices.) While the management response may seem obvious -- make sure these services are given to deaf clients -- in fact, SSO's investigative task is not yet complete. First, with respect to facilities services, it is important to know which among the possible facilities are most successful with deaf clients. The hypothetical findings in Table 4 suggest that facilities A and C are most successful. SSO would want to find out

Table 2

Office D

Closure Status by Disability (Hypothetical)

Disability	Closure Status	
	26	28/30
Orthopedic	65%	35%
Deaf	15%	85%
MR	60%	40%
Mental Illness	55%	45%
⋮	⋮	⋮
Total	58%	42%

Table 3

Office D

Deaf Disability Clients:

Closure Status by Services Received (Hypothetical)

Service	Closure Status	
	26	28/30
Physical Restoration	45%	55%
Transportation	25%	75%
OJT	80%	20%
Appliances	30%	70%
Facilities	85%	15%
⋮	⋮	⋮
Total	58%	42%

Table 4

Office D

Deaf Clients Receiving Facility Services:

Closure Status by Facility (Hypothetical)

Facility	Closure Status	
	26	28/30
A	90%	10%
B	60%	40%
C	80%	20%
D	65%	35%
⋮	⋮	⋮
Total	85%	15%

why. Is it because those facilities provide specific types of service? Do they tend to deal with younger or older clients? Do they have linkages with potential employers? It may be that these facilities' successes are simply artifacts of such factors, in which case it may not be warranted to send all deaf clients to those facilities. Finally, even if warranted on the basis of success rate, SSO will need to consider the cost implications of sending an entire group of clients through facility service.

With respect to on-the-job training, other questions are relevant. Can the office develop enough OJT slots to accommodate all deaf clients? Are all deaf clients sufficiently prepared to enter OJT slots or will extensive training, appliance, and maintenance payments be required to bring these clients to the necessary level of readiness for OJT? Only if these and other issues can be resolved is it appropriate to target OJT slots to deaf clients. (Again, this presumes that such targeting will not effectively exclude nondeaf clients from OJT.)

In this brief example, we have tried to show the kinds of questions and analyses which would be relevant in evaluating and attempting to improve productivity. In general, SSO and service staff will want to ask questions regarding such issues as:

- client selection: case difficulty and client motivation are obvious contributing factors in successful outcomes;
- service effectiveness: outcomes will be affected by the use of diagnostics and extended evaluation to assess potential, targeting of services to maximize success, and existence and effectiveness of placement;
- service process problems: cases may be allowed to languish in certain statuses, client-counselor interaction may be poor, etc.;
- service planning: job goals may be inappropriate for the labor market, or may be beyond the clients' capacities; and
- inefficiencies: overly expensive plans may be the norm, when less expensive plans could suffice; high cost vendors may be used too often.

HVRSB will want to encourage a "partnership" between SSO and field managers. Specifically, managers must clearly understand that the agency's new productivity objectives rise out of the information goal assessment and prioritization activities. They must understand how information can be used, as discussed here and in other VR-TECHS.[1] Finally, they must be able to call upon SSO to assist them in identifying causes of problems and suggesting solutions. SSO must be prepared to respond to inquiries from the field and to apply their analytic creativity to ferret out the true causes as completely as possible. In addition, SSO must fully understand the capabilities of HVRSB's new MIS, and be prepared to remediate gaps in the system when necessary. This partnership ideally will be further expanded to involve the local field staff in thinking through the causes of performance and how to improve performance. After specific problems are identified, the field staff should draw counselors into the discussion. This will provide a major training experience for counselors which can only improve the agency's internal capabilities. Again, the quality circle activities, with or without SSO, would be an ideal vehicle for encouraging thinking about performance in this way.

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[1] See:

A Conceptual Approach to the Design of Management Information Systems for State Vocational Rehabilitation Agencies, by Stanley E. Portny, Stanley E. Portny and Associates, Inc., June 1982, 24 pp.

Work Plan for Implementing MIS Redesign by Kansas Rehabilitation Service, by J. Mark Rogers, Berkeley Planning Associates, July 1982, 40 pp.

Vocational Rehabilitation Program Standards Evaluation System Final Report, Berkeley, California: Berkeley Planning Associates.

Volume II: Using the System: An Analytic Paradigm, June 11, 1982.

Appendix A, The Rehabilitation Executive's Evaluation System (TREES), Data-Based Decision Support Using the Program Standards System, June 11, 1982.